**Title:** De-NOX Technologies: Lower-Cost, High-Performance, SNCR Systems

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## **Summary:**

De-NOX Technologies has extensive experience with urea and ammonia-based systems, starting in 1985 and totaling 20 boiler installations in 7 facilities. That expertise has been refined and improved to offer the lowest cost alternative for boiler facilities needing add-on SNCR equipment. De-NOX Technologies knows how to, where, and how much reagent to inject into boiler systems to maximize NOX reduction with the lowest possible chemical consumption. The combination of a superior design and low overhead results in project costs which are substantially lower than the competition.

The advantage of SNCR is that it is relatively inexpensive to install (\$5 - 20 per kW, depending upon boiler size and complexity of control), and can be accommodated within an existing facility without significant interference to operations. Operating costs depend upon inlet/outlet concentrations and boiler capacity, but is generally less than \$500 per ton of NOX removed.

SNCR can continuously reduce NOX emissions by over 50%, and in combination with low-NOX burners or gas co-firing, can produce NOX control levels approaching that of SCR. Industries that can benefit from this technology include incinerators, industrial boilers, process plant heaters, paper mill recovery boilers, and cement kilns.

De-NOX Technologies provides cost effective Design, Equipment, Installation, and Consulting services to Industrial Boiler Operators interested in installing Selective Non-Catalytic NOX Reduction systems, either urea or ammonia reagents. Contract services could include the process engineering, detailed engineering, equipment selection, equipment prefabrication, installation, start-up and testing. Other services offered are permitting support, CEM upgrades, balance-of-plant upgrades, and bulk urea handling systems.

DNT can also provide consulting services to those facilities evaluating the technique, which may include preliminary design, estimates, and temporary demonstration units.